

AMENDMENTS TO CLAIMS

Please replace the claims with the following:

1. (Currently Amended) A process for controlling at least two properties of a lubricant or working fluid for use in a system in which operating conditions change which process comprises:

- (i) providing a base fluid in which the properties are optimal for “warm” operating conditions;
- (ii) providing a diluent which is miscible with said base fluid under all system operating conditions; and
- (iii) reversibly diluting said base fluid with the diluent in response to change in system operating conditions;

wherein the at least two properties include viscosity and at least one additional property selected from the group consisting of traction coefficient, compressibility, lubricating film thickness and pressure response of viscosity.

2. (Canceled)

3. (Previously presented) The process of claim 1 in which the base fluid has a traction coefficient which is greater than 0.08 (at 2.2 % SRR and 1.125 GPa).

4. (Previously presented) The process of claim 1 in which the base fluid comprises a hydrogenated mixture of dimers and trimers of α -methyl styrene.

5. (Previously presented) The process of claim 1 in which the base fluid comprises glycerol and one or more additional components selected from the group consisting of alkylene glycols, polyoxyalkylene glycols, and mixtures thereof.

6. (Previously presented) The process of claim 1 in which the diluent is chosen from a fluid comprising a mixture of cis and trans isomers of decahydronaphthalene and a fluid

comprising methyl-substituted and ethyl-substituted cyclohexanes with 9 carbon atoms on average.

7. (Previously presented) The process of claim 1 in which the diluent comprises a mixture of hydrocarbons and/or organic esters having a boiling range within the range of from 50 °C to 200 °C.

8. (Previously presented) The process of claim 1 in which the diluent is water.

9. (Previously presented) A process for lubricating a system in which operating conditions change which process comprises:

- (i) controlling at least two or more properties of a lubricant in accordance with the according to the process of claim 1; and
- (ii) applying the resultant lubricant to the system.

10. (Previously presented) A process for providing a working fluid to a system in which operating conditions change which process comprises:

- (i) controlling at least two properties of the working fluid according to the process of claim 1; and
- (ii) supplying the resultant working fluid to the system.

11. (Previously presented) The process of claim 1 in which the step of reversible dilution involves a step of removing diluent from a mixture of base fluid and diluent by evaporation or distillation and energy generated by the system is used to provide at least part of the energy required for this step.

12. (Previously presented) The process of claim 11 in which the energy generated by the system is supplied from at least one of:

- (i) hot water from the system cooling system;
- (ii) lubricant or working fluid that has already passed through an evaporation or distillation stage;
- (iii) heat of vaporization from hot vapor in a distillation or evaporation chamber;
- (iv) exhaust gases; and
- (v) an electrical heating stage.

13. (Previously presented) An apparatus for carrying out the process of controlling at least two properties of a lubricant or working fluid for use in a system in which operating conditions change comprising:

- (i) reservoir means comprising a diluent;
- (ii) a mixing zone comprising a base fluid;
- (iii) dispensing means for supplying the diluent from the reservoir means to the mixing zone;
- (iv) separating means for removing diluent from the mixing zone by vaporisation, condensation and storage of diluent for re-use; and means enabling the contents of the mixing zone to contact an operating component of the system.

14 . (Previously presented) A hydraulic system containing a working fluid composition comprising water as a diluent and a base fluid which comprises glycerol and one or more additional components selected from the group consisting of alkylene glycols, polyoxyalkylene glycols, and mixtures thereof.

15. (Previously presented) The process of claim 1 in which the base fluid has a viscosity of less than 100 mPas in the temperature range 90 °C to 150 °C.

16. (Previously presented) The process of claim 3 in which the base fluid has a viscosity of less than 100 mPas in the temperature range 90 °C to 150 °C.

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)